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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,402	12/01/2003	Klaus Simon	081468-0307087	8896
909 7590 09/17/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP Eric S. Cherry - Docketing Supervisor P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER KIM, PETER B	
			ART UNIT 2851	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/724,402

Applicant(s)

SIMON ET AL.

Examiner

Peter B. Kim

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 8-17 is/are rejected.
- 7) ☒ Claim(s) 5 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicant's arguments filed on July 24, 2007 have been fully considered.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, and 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gao et al. (Gao) (6,426,184).

Gao discloses a lithographic projection apparatus and a device manufacturing method comprising a radiation system (802), a patterning structure (801), a substrate table (inherent to the apparatus) configured to hold the substrate (810), a projection system (806) to project the patterned beam onto a target portion; and a fluid processing cell (Fig. 8A-8C, Fig. 9A-9C) in fluid communication with a surface of a substrate, the fluid processing cell configured so that a fluid can be brought into contact with the substrate so as to interact with the target portion (col. 24, lines 35-55), the cell comprising a plurality of separate chambers (904a-904c) in fluid communication with respective areas of substrate held on the substrate table, and the fluid processing cell configures so that different area of the substrate may be subjected to different fluid processes simultaneously or to a fluid process in which the substrate is subject to the fluid or reagent and a radiation exposure process simultaneously (Fig. 9A-9C, col. 27, lines 15-64). Gao discloses processing an area (904b) of the substrate by exposing it to a fluid that interacts therewith to effect a process, wherein the area of the substrate does not include the target portion

Art Unit: 2851

(904a, 904c) and the projecting and the processing are carried out at least partially simultaneously (Fig. 9A-9C, col. 27, line 15- col. 29, line 21). Gao discloses the fluid processing cell comprising a plate 902 having walls (904a-904c) projecting therefrom to define chambers and fluid chambers (1004). Gao discloses an elongated chamber (Fig. 10) and a fluid inlet (1012) at a first end and a fluid outlet (1013) at a second end. Gao discloses the surface of the fluid processing cell provided with anti-reflective coating (col. 29, lines 42-49). Gao discloses the fluid processing cell separable from the substrate table and a substrate which can be attached to the fluid processing cell (Fig. 9A-9C). Gao discloses a fluid processing cell in fluid communication with surface of a substrate held on the substrate table, the fluid processing cell comprising a plurality of chambers (904a-904c, 1004) in fluid communication with respective areas of the substrate (col. 27, lines 15-64).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gao et al. (Gao).

Gao discloses the claimed invention as discussed above; however, Gao does not disclose the fluid processing cell integrated into the substrate table. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the fluid processing cell integral with the substrate table, since it has been held that forming in one piece an article which

Art Unit: 2851

has formerly been formed in two pieces and put together involves only routine skill in the art.

*Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

***Allowable Subject Matter***

Claims 5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, none of the prior art of record teaches or discloses an apparatus wherein the height of each chamber decreasing from the fluid inlet toward the outlet and capillary forces assisting removal of the fluid in combination with the limitations of claims 4/1.

Regarding claim 7, none of the prior art of record teaches or discloses an apparatus wherein the height of chamber is selected so as to minimize reflection of radiation when a fluid is present in combination with the limitations of claim 1.

***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

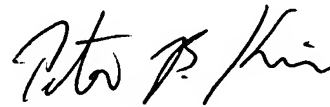
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter B. Kim whose telephone number is (571) 272-2120. The examiner can normally be reached on 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Peter B. Kim". The signature is fluid and cursive, with the first name "Peter" and last name "Kim" being clearly distinguishable.

Peter B. Kim  
Primary Examiner  
Art Unit 2851

September 10, 2007